

## SYMPOSIUM ON CLIMATE CHANGE LOCALISM

### THE TRUMP ADMINISTRATION'S ASSAULT ON CALIFORNIA'S GLOBAL CLIMATE LEADERSHIP

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The Trump Administration is taking direct aim at California's global leadership on climate change. The U.S. Environmental Protection Agency (EPA) is proposing to revoke the most effective tool California has to exercise climate leadership: its special authority under federal law to regulate tailpipe emissions more stringently than the federal government. California's use of this authority has led to the invention of automotive technology now standard around the world, including the catalytic converter. The state also used this power in 2002 to enact the globe's first greenhouse gas standards for automobiles. If the Trump Administration succeeds in revoking California's authority, California will find it very difficult to meet its ambitious 2030 greenhouse gas target. The attack on the state's authority will also undermine other states' efforts to cut their greenhouse gas emissions as well as conventional air pollutants, since thirteen states follow California's standards in whole or in part. And the Trump Administration's revocation will undercut California's role as a green technology innovator by eliminating the strongest regulatory signal the state sends to automotive entrepreneurs. The last result is perhaps the most pernicious of all, because the state's role as a green technology leader has the capacity to help reduce greenhouse gas emissions around the world.

Although California has long been viewed as an environmental leader, the Trump Administration's announcement in March 2017 that the United States would withdraw from the Paris Agreement elevated the state's governor to even greater prominence. Jerry Brown quickly became the de facto leader of U.S. efforts to reduce greenhouse gases despite the U.S. withdrawal. Global leaders responded immediately and positively. In the most notable early sign that Brown was being taken seriously, President Xi Jinping met with Brown during an international energy meeting in Beijing shortly after the announcement. U.S. Energy Secretary Rick Perry was relegated to meeting with a vice premier.<sup>1</sup> The President of the United Nations' twenty-third Conference of the Parties later appointed Brown as Special Advisor for States and Regions so that he would play a formal role in international climate talks.<sup>2</sup> Since the Trump Administration's announcement, Brown has spoken at the Vatican about climate change, has met with European Union leaders on the topic, and has convened a meeting of the world's top climate scientists in Oslo, Norway.<sup>3</sup> In September 2018, he hosted a Global Climate Summit in San Francisco. His cochairs included China's chief negotiator for the Paris Accord, the Executive Secretary of the U.N. Framework

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<sup>1</sup> See Brian Spegele, [China Engages California on Climate After Trump's Paris Snub](#), WALL ST. J. (June 11, 2017).

<sup>2</sup> Office of Governor Edmond G. Brown, Jr., [Governor Brown to Represent World's States and Regions Committed to Climate Action at UN Climate Conference, European Union and the Vatican](#) (Oct. 31, 2017).

<sup>3</sup> *Id.*

Convention on Climate Change, Michael Bloomberg, and the Chair of the Mahindra Group, a \$20 billion Indian conglomerate based in Mumbai.<sup>4</sup>

Why do global leaders accord a state governor so much international attention on an issue of global importance? Part of the reason is California's sheer size: if the state were an independent country, its economy would rank fifth in the world, ahead of France and Great Britain.<sup>5</sup> Part of the global respect comes from the past actions of the state's governors, who played visible global roles on climate policy well before Trump decided to abandon the Paris Agreement. A third reason is that Governor Brown and California represent a way forward on Paris by keeping a significant part of the United States—a number of states, cities, and businesses—engaged in and committed to reducing greenhouse gases. And undoubtedly, part of the respect Brown receives is the focus of this essay: California's aggressive policies to reduce its greenhouse gas emissions. The state has cut its emissions to 1990 levels before its legislative deadline of 2020 and just enacted legislation to cut the state's greenhouse gases by 40 percent below 1990 levels by 2030. California has long played a critical and well-recognized role as an environmental leader. For decades, this leadership has helped export both environmental policy and environmental technology around the world. The state's leadership on air pollution is well known and California has emerged as one of the most effective, innovative leaders on climate change as well. It is this leadership that the Trump Administration is attempting to undercut.

#### *The California Exception Under the Clean Air Act*

Under the federal Clean Air Act, only the federal government can regulate automobile emissions, except for California. All other states are preempted from doing so. California can issue its own standards as long as they are stronger than the federal government's. In order to regulate, however, the state must seek a waiver from the EPA. The EPA must grant the waiver if California can establish that it has "compelling and extraordinary circumstances" and that manufacturers can develop and apply the necessary technology to meet the standards, taking the costs of compliance into consideration.<sup>6</sup> Over the provision's fifty-two-year history, the EPA has denied California a waiver only once, a denial discussed below.

In practice, the California exception to preemption has been extraordinarily effective in reducing air pollution. The process has worked relatively predictably since 1967: California sets tough standards, and if the auto industry can meet the standards, the federal government follows suit. California then ratchets the standards even tighter, and if they work, the federal government again follows suit. Over the last fifty years, this pattern has repeated itself at least nine times.<sup>7</sup> The arrangement has led to two of the planet's greatest environmental success stories. The combination of California and federal regulations imposed in the 1970s led to the development of a three-way catalytic converter that has made cars 99 percent cleaner than their counterparts in the 1960s. The catalytic converter is now required on cars sold around the globe. Further, the development of the catalytic converter led to the widespread introduction of unleaded gasoline because leaded gasoline destroyed the catalytic converter.<sup>8</sup> These two developments saved several billion dollars in health care costs and hundreds of thousands of lives.

<sup>4</sup> See Global Climate Action Summit, [Global Climate Action Summit Appoints China's Chief Climate Change Negotiator as Fifth Co-Chair](#) (July 24, 2018).

<sup>5</sup> See Jonathan Lansner, [How California Regained Title of World's 5th Largest Economy](#), MERCURY NEWS (May 10, 2018).

<sup>6</sup> [42 U.S.C. § 7543](#).

<sup>7</sup> For a description of the various iterations of state followed by federal standards, see Ann E. Carlson, [Iterative Federalism and Climate Change](#), 103 NW. L. REV. 1097 (2009). For the ninth iteration, so-called LEV Tier 3 standards, see [United States. Cars and Light-Duty Trucks: California](#), DIESELNET.

<sup>8</sup> See Ann Carlson, [The Catalytic Converter](#) (working draft on file with author).

### *California's Role in Greenhouse Gas Emissions Standards for Cars*

The unique California-federal arrangement—what I have previously termed “iterative federalism”<sup>9</sup>—has also been central to the U.S. effort to cut greenhouse gas emissions from the transportation sector. The effort began in 2002 during the George W. Bush Administration when the California legislature passed a bill directing its Air Resources Board to develop and implement the world's first greenhouse gas (GHG) emissions standards for cars. California sought a waiver from EPA to adopt the standards but for the first time in its history, the EPA denied the waiver. The EPA claimed that California lacked “compelling and extraordinary circumstances” to regulate GHGs. California sued, but before a court could rule on the issue, Barack Obama was elected President and granted the state the waiver.<sup>10</sup>

The Obama Administration, in cooperation with California, then ordered a version of California's standards to apply nationally, setting the country's first GHG emissions standards for model year 2012-16 cars. California accepted the new national standards even though the EPA granted it a Clean Air Act waiver, agreeing to forgo issuing its own standards as long as strong federal standards were in place. The 2012-16 standards required GHG and fuel economy standards that would produce fleet averages of approximately thirty-five miles per gallon by 2016. Every auto manufacturer achieved the standards.

California and the federal government extended this arrangement for 2017-25 model year automobiles by issuing a new set of standards. The harmonized standards require fleet averages of around 54.5 miles per gallon by 2025. The combined standards for GHG emissions for model years 2012-25—if allowed to go into effect—are projected to eliminate more than six billion tons of GHGs from the atmosphere, an amount greater than 2014's total U.S. carbon dioxide emissions.<sup>11</sup>

When the second round of emissions standards was adopted, the EPA also granted California a waiver to issue GHG standards for the 2017-25 period. As with the 2012-16 emissions standards, California agreed not to implement separate standards as long as strong federal standards remain in effect. The waiver also approved two other California programs aimed at tailpipe emissions. One requires auto manufacturers to meet a requirement for zero emission vehicles (e.g., electric or hydrogen fuel cell vehicles) of about ten to twelve percent by 2025. Nine states have opted into this program. Another program, called the Low Emission Vehicle III program (the third iteration of this program), cuts conventional air pollutants from tailpipes. Thirteen states have opted into this program and the GHG emissions standards.

### *The Trump Administration Assault on GHG Car Standards*

The Trump Administration's EPA is poised to gut two central components of the car standards for model years 2021-25. The first part of the car standard rollback strategy, which the EPA has indicated is its preferred strategy but has not yet finalized, is to freeze the national combined Clean Air Act and fuel economy standards at 2020 levels for the 2021-25 period.<sup>12</sup> If the EPA issues a formal announcement that it intends to roll back the standards, litigation is sure to follow.

The second strategy is to revoke the California waiver so that not only would the federal government roll back national standards to 2020 levels for the foreseeable future, but California also would lack the authority to maintain

<sup>9</sup> See Carlson, *supra* note 7.

<sup>10</sup> U.S. Env'tl. Prot. Agency, [California State Motor Vehicle Pollution Control Standards: Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's 2009 and Subsequent Model Year Greenhouse Gas Emission Standards for New Vehicles](#), 74 FED. REG. 32744 (July 8, 2009).

<sup>11</sup> U.S. Env'tl. Prot. Agency, [Regulations for Greenhouse Gas Emissions from Passenger Cars and Trucks](#); Env'tl. & Energy Study Inst., [Fact Sheet – Vehicle Efficiency and Emissions Standards](#) (Aug. 26, 2015).

<sup>12</sup> See U.S. Env'tl. Prot. Agency, [The Safer and Affordable Fuel Efficient Vehicles Proposed Rule for Model Years 2021-2026](#).

the standards for its fleet (and the thirteen states that follow the California GHG standards.)<sup>13</sup> The revocation of the waiver will apparently cover all the GHG emissions standards and the Zero Emission Vehicle (ZEV) program. California has already made clear that it will sue if the EPA revokes the waiver.

Both of these EPA strategies have significant legal vulnerabilities and may not succeed. If the EPA manages to prevail, the agency will deal a significant blow to U.S. efforts to reduce GHG emissions from the transportation fleet and hamper California's ambitious climate goals and air pollution policy. The EPA may also weaken California's role as global environmental policy and technology leader, demonstrating the potential limits of Governor Brown's efforts to be the de facto leader of U.S. climate leadership. At the end of the day, in a system of federalism, a state can provide only so much global leadership in the face of national intransigence.

### *Undermining Efforts to Meet Climate Goals*

The repeal of the 2021-25 standards and the revocation of California's standards would be the Trump Administration's most consequential act against Obama-era climate policies. Though the decision to repeal the Obama Administration's Clean Power Plan (which would regulate the electricity sector) has garnered more attention, the rollback of GHG standards for automobiles promises to do much more damage to any effort to reduce U.S. greenhouse gas emissions dramatically. That's because, in contrast to the electricity sector, transportation emissions are on the increase.

The causes of this increase are complex but include a steady increase in vehicle miles travelled and very low gasoline prices.<sup>14</sup> Not only are drivers driving more,<sup>15</sup> but as gasoline prices remain low, consumers are purchasing larger, less efficient cars and trucks. Without regulations mandating reductions in GHGs and increases in fuel economy, we may repeat history: we saw no increase in fuel economy standards between 1978 and 2007.<sup>16</sup>

The combined EPA/National Highway Transportation Safety Administration standards have led to the most fuel efficient automotive fleet in history.<sup>17</sup> If the EPA allows the tougher standards to take effect and as more efficient cars enter the stream of commerce, transportation emissions will begin to decline. By contrast, if the EPA freezes the 2020 standards in place for model years 2020 and forward, we will see either an increase in transportation emissions or very little decline. The Union of Concerned Scientists estimates that freezing the standards at 2020 levels will increase U.S. emissions by 2.2 billion tons of GHGs, and less efficient cars will burn two hundred million more gallons of gasoline by 2040 than they would if the tougher standards remained in effect.<sup>18</sup>

The environmental effects of repealing California's Zero Emissions Vehicle Program waiver will also have serious consequences. California and the nine states that have adopted the ZEV regulations are poised to increase the market share of electric and other clean vehicles dramatically. The regulation is designed to push automotive companies to manufacture cars that emit no carbon dioxide and no conventional pollutants at a price consumers will pay and with technology that consumers will purchase. The state's ZEV program has already led to the introduction of a huge number of electric vehicles in the state and California leads the country by a large measure in total ZEV vehicles on the road. The ZEV program, with nine states following California's lead, is expected to increase

<sup>13</sup> *Id.*

<sup>14</sup> See Congressional Research Service et al., [Vehicle Fuel Economy and Greenhouse Gas Standards: Frequently Asked Questions](#) 31 (May 24, 2018).

<sup>15</sup> See U.S. Fed. Highway Admin., [Moving 12-Month Total Vehicle Miles Traveled](#), TRAVEL VOLUME TRENDS.

<sup>16</sup> U.S. Env'tl. Prot. Agency, [Light-Duty Vehicle CO<sub>2</sub> and Fuel Economy Trends](#), Highlights of CO<sub>2</sub> and Fuel Economy Trends; Union of Concerned Scientists, [A Brief History of U.S. Fuel Economy Standards](#).

<sup>17</sup> See U.S. Energy Info. Admin., [Analysis of the Effect of Zero-Emission Vehicle Policies: State Level Incentives and the California Zero-Emission Vehicle Regulations](#) 37 (Sept. 2017).

<sup>18</sup> Dave Cooke, [Rolling Back Vehicle Standards: By the Numbers](#), UNION OF CONCERNED SCIENTISTS (July 20, 2018).

the total number of electric vehicles dramatically and to improve the national distribution of ZEV vehicles away from California: by 2025 New York sales are expected to exceed California sales if the ZEV regulation remains in place.<sup>19</sup> The waiver revocation will seriously impede this effort.

If the Trump rollback succeeds, the United States will also see the gulf increase between what it committed to as part of the Paris Agreement and actual U.S. greenhouse gas emissions. The federal government is no longer committed to reducing the country's greenhouse gas emissions, and the long-term effects of Trump's policy will have repercussions long after he leaves office. What we do today will affect how difficult it will be to cut emissions deeply years from now. The Obama Administration committed the United States to emissions reductions of 26–28 percent by 2025. Estimates are that the United States will achieve only a 17–18 percent decline in emissions by 2025 given the Trump Administration rollbacks. The scenario for post-2025 if the administration follows through on its threat to freeze the car standards and revoke California's waiver for GHG standards and zero-emission vehicles is even worse, as many of the reductions that come from those policies occur in later years.<sup>20</sup> For these reasons, the Climate Action Tracker—an independent consortium of research organizations—rates U.S. policy to reduce greenhouse gases as “Critically Insufficient.”<sup>21</sup>

#### *Impeding California's Efforts to Cut Greenhouse Gases, Undermining State Leadership*

Repealing California's waiver to cut GHGs and mandate zero emissions vehicles is also a direct assault on California's policy to cut the state's greenhouse gases by 40 percent below 1990 levels by 2030. Transportation emissions are far and away the largest source of greenhouse emissions in the state, 37 percent of total statewide emissions compared to just 19 percent from the electricity sector and 21 percent from industrial sources.<sup>22</sup> Two of the principal mechanisms to cut transportation emissions are the stringent standards to cut greenhouse gases from automobiles and the ZEV mandate.<sup>23</sup> California's overall Mobile Source Strategy, of which the two threatened programs are part, is designed to eliminate sixty-four million metric tons of greenhouse gases from 2021 to 2030. California must cut 621 million metric tons of emissions cumulatively to meet its 2030 target. If the state can't rely on emissions cuts from passenger vehicles through the GHG and ZEV programs, it will need to make up more than 10 percent of its emissions cuts in some other way, a very difficult scenario for the state.<sup>24</sup>

To be sure, California's own emissions cuts are not crucial to long term efforts to stabilize global temperatures. The state's total emissions are merely a fraction of the planet's annual emissions output—about one percent. That is not why California's leadership is so important nationally and globally. Instead, the Trump Administration's assault on California tailpipe standards is an assault on its leadership as a global model for policy and as one of the most effective drivers of technological innovation to clean our auto fleet. California's leadership, in other words, ripples around the globe in crucial ways that move us closer to a sustainable trajectory for the planet. The Trump assault threatens much more than the total emissions the state can cut from its transportation fleet. Whether the courts will stop the assault remains to be seen.

<sup>19</sup> See U.S. Energy Info. Admin., *supra* note 17, at 37.

<sup>20</sup> See Rhodium Group, [Taking Stock 2017: Adjusting Expectations for U.S. GHG Emissions](#) 8 (May 25, 2017).

<sup>21</sup> U.S.A., [CLIMATE ACTION TRACKER](#).

<sup>22</sup> See Cal. Air Res. Bd., [California's 2017 Climate Change Scoping Plan](#) 11 (Nov. 2017).

<sup>23</sup> *Id.* at 25.

<sup>24</sup> *Id.* at 28. The ZEV mandate and GHG standards are also key to California meeting federal air pollution standards. The state has two of the smoggiest air districts in the country, the South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District, both out of compliance with federal standards for ozone and fine particulates. Stringent standards for vehicles are the most important means to reduce particulate and nitrogen oxide pollution.